

Claims

We claim:

1. A method of making a multilayer structure for packaging bone-in meat comprising the steps of:

5 coextruding a multilayer structure comprising at least a sealant layer comprising a material selected from the group consisting of polyolefins, ionomers, and blends thereof, a first polyamide layer, and a barrier layer; and

biaxially orienting the multilayer structure.

2. The method of claim 1 further comprising the step of annealing the multilayer structure.

10 3. The method of claim 1 wherein the barrier layer is disposed between the sealant layer and the first polyamide layer.

4. The method of claim 1 wherein the first polyamide layer is disposed between the sealant layer and the barrier layer.

5. The method of claim 1 wherein the barrier layer comprises ethylene vinyl alcohol copolymer.

15 6. The method of claim 5 wherein the ethylene vinyl alcohol copolymer has an ethylene content of between about 24 mol % and about 52 mol %.

7. The method of claim 5 wherein the ethylene vinyl alcohol copolymer has an ethylene content of between about 27 mol % and about 42 mol %.

20 8. The method of claim 1 wherein the sealant layer comprises a blend of linear low density polyethylene and low density polyethylene.

9. The method of claim 1 wherein the first polyamide layer comprises a blend of semi-crystalline polyamide and amorphous polyamide.

10. The method of claim 1 wherein the first polyamide layer comprises a blend of nylon 6 and amorphous polyamide.
11. The method of claim 1 wherein the first polyamide layer comprises a blend of nylon 6,66 and amorphous polyamide.
- 5 12. The method of claim 1 wherein the first polyamide layer comprises a blend of a first semi-crystalline polyamide, a second semi-crystalline polyamide, and amorphous polyamide.
13. The method of claim 1 wherein the first polyamide layer comprises a blend of nylon 6, nylon 6,69 and amorphous polyamide.
- 10 14. The method of claim 1 wherein the multilayer structure further comprises a tie layer.
15. The method of claim 1 wherein the first polyamide layer forms an outer layer of the multilayer structure.
16. The method of claim 1 further comprising the step of moisturizing the multilayer structure by applying water to the multilayer structure.
- 15 17. The method of claim 1 further comprising the step of irradiating the multilayer structure to promote crosslinking of the layers of the multilayer structure.
18. The method of claim 1 wherein the multilayer structure is between about 1 mil and about 8 mils thick.
19. The method of claim 1 wherein the multilayer structure is between about 1.5 mils and about 5 mils thick.
- 20 20. The method of claim 1 wherein the multilayer structure further comprises a second polyamide layer, and wherein the first and second polyamide layers are disposed on opposite sides of the barrier layer.

21. The method of claim 20 wherein the second polyamide layer comprises a blend of semi-crystalline polyamide and amorphous polyamide.
22. The method of claim 20 wherein the second polyamide layer comprises a blend of nylon 6 and amorphous polyamide.
- 5 23. The method of claim 20 wherein the second polyamide layer comprises a blend of nylon 6,66 and amorphous polyamide.
24. The method of claim 20 wherein the second polyamide layer comprises a blend of nylon 6, nylon 6,69 and amorphous polyamide.
25. The method of claim 20 wherein the multilayer structure further comprises an outer
10 layer comprising a material selected from the group consisting of polyolefins, polyamides ionomers, polyesters and blends thereof, and wherein the first polyamide layer is disposed between the barrier layer and the outer layer, and the second polyamide layer is disposed between the barrier layer and the sealant layer.
- 15 26. The method of claim 25 wherein the multilayer structure further comprises a tie layer between the outer layer and the first polyamide layer.
27. The method of claim 25 wherein the multilayer structure further comprises a tie layer between the sealant layer and the second polyamide layer.
28. The method of claim 25 wherein the multilayer structure comprises a first tie layer between the outer layer and the first polyamide layer and a second tie layer between the
20 sealant layer and the second polyamide layer.
29. The method of claim 1 wherein the multilayer structure is coextruded as a tube.
30. The method of claim 1 wherein the multilayer structure is biaxially oriented by a double bubble method.

31. The method of claim 1 wherein the multilayer structure is oriented via tenter frame.